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Verbindingskracht & combinatievermogen

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SUMMARY

The importance of knowledge in today's society has many consequences for education. For example, vocational training is nowadays required to bridge the gap between the changes in the practical field and the necessary competences of employees. For this reason the task of the ROCs (Regional Centres for Educational and Vocational Training) was adjusted in 1998 and 2004; their public task was broadened and a private task added. One of the arguments for this adjustment was, amongst other things, that the education provided has to be more in line with the issues of innovation in the regional business and industry sector. In actual practice, this means that the ROCs have to co-operate more closely with businesses and industries, and in different ways than they used to do. Schools and businesses have to work together in shaping knowledge innovation and exploring combinations of Learning&Working. The ROCs, however, have problems with this expansion of their task, which is highly complex, encroaching deeply upon the organization. This means that they have not yet found a suitable approach to the innovation issue. This is illustrated by the fact that although there is a strong feeling of urgency with respect to collaboration and effective innovation, only few visible results and successful alliances have as yet been realised. Formulating the answer to the questions of knowledge innovation depends to a large extent on the way in which the partnerships between the ROCs and business organizations will take shape. One may expect that good partnerships between the ROCs and businesses will increase the chances of achieving successful knowledge innovations.

In this dissertation both theoretical and empirical research has been conducted on the co-operation between the ROCs and the business sector with respect to 'Learning&Working' and its effect on the actual realisation of knowledge innovation. The nature of this co-operation and the role which sustainability plays in it, form the essence of this research. The objective of this dissertation is to investigate the connection between the characteristics of the partnership alliances and the knowledge innovation realised in order to establish what it is that makes a knowledge alliance successful. Based on this study, a number of recommendations are made about the most suitable approach to be taken by the ROCs in entering knowledge-alliances.

The theoretical developments related to the main research question in this study will be discussed against the background of the 'Learning&Working' combination. The following three subjects are specified separately:

1. Knowledge-innovation in Learning&Working,
2. Setting up alliances,
3. Sustainability.

Also new combinations among these three issues will be touched upon. Combining these three elements in particular is considered as one of the most important factors in achieving successful knowledge-alliances. Understanding the cohesion among these elements forms the basis of the conceptual model used in this study.

The subject of 'Knowledge-innovation in Learning&Working' includes a number of aspects which will be examined in further detail: the cycles of knowledge-creation and knowledge-transfer, the various types of collaboration in the process of knowledge-innovation, the concept of lifelong-learning, which is increasingly placed in an economic context, distinctive new competences and forms of education, and the changing role of the learning-workingplace in both the ROC and the business sector.

On the basis of the theory in this field, which we have linked to a case taken from the daily working practice of an employee and an apprentice, relevant changes in the curriculum, the context, as well as in the competences of employees and apprentices are explored. These concrete changes are considered as the result of co-operation on the level of knowledge innovation. The theoretical insights will be translated into the following three types of the dimension 'Changes' in the research model, which have to be tested empirically: Changes in the curriculum, Changes in the context, and Changes in the competences.

The subject of 'alliances' includes a description of the development of various forms of co-operation within the corporate world and between the ROC and companies, among which public-private combinations in several sectors as well as the non-profit organization. In addition, the consequences of this co-operation for the management of the ROCs are addressed. Further, we will define the concept of 'knowledge alliance', and touch upon the reasons, interests, and values motivated with respect to strategic co-operation, as well as the approach to knowledge transfer and the timing of innovation processes in this co-operation. Based on this discussion, the characteristics of a good alliance are described. Next, our theoretical

underpinning will be translated into the following five principal characteristics of the dimension ‘Strategic Alliances’ of the research model, to be tested empirically: Quality of the relation, Relation between public and private tasks, Duration of the relationship, Temporatisation capability, and Knowledge transfer.

The subject of ‘sustainability’ entails a focus on the large number of definitions of this term. In the discussion of the triple P of Planet, Profit, and People, the emphasis lies on People. In addition, attention is paid to ecological and social sustainability, the role of social capital in knowledge innovations, the design of sustainability in the co-operation relationships between the ROCs and companies, dynamics in knowledge alliances, and the relation between sustainability and dynamics. The combination of sustainability and dynamics is considered as an essential characteristic of the public-private co-operation in the field of knowledge innovation. The theoretical elaboration of the sustainability concept is translated into one characteristic of the ‘Strategic Alliances’ dimension in the research model, to be tested empirically: the combination Sustainable&Dynamic.

The theoretical insights have led to the formulation of the principal research question of this study and three subquestions. The main question is the following: How strong are the relations among the characteristics of strategic alliances and the changes in the curriculum, the context, and the competences in the field of Learning&Working? In this respect, the question “What is a succesful alliance” is also addressed. In addition to the main research question, the three subquestions are:

1. What is the nature of the strategic alliances between the ROC and the business sector with respect to knowledge innovation in the field of Learning&Working?
2. To what extent are these relations sustainable and dynamic?
3. To what degree are there changes in the curriculum, the context, and the competences of the apprentices and employees who participate in the innovation trajectories within the alliances?

The focal point of the first two subquestions is what it is that makes an alliance good and thus sustainable. A good strategic alliance is expected to be successful if the knowledge innovation pursued in this co-operation relationship leads to visibly concrete improvements of the competences of the participants in education, the curriculum, and the context. The degree to which the characteristics ‘sustainability’ and ‘dynamics’ are present in the co-operation processes within the alliance con-

tributes to the extent of its success. In order to answer the four questions, a conceptual model has been developed which consists of two components: 'strategic alliances' (SA) and 'changes in the curriculum, context, and competences' (C3C).

In this model relations are presumed among:

1. the five principal characteristics and the combination characteristic Sustainable&Dynamic within the Strategic Alliances;
2. the three types of change;
3. the characteristics of Strategic Alliances and the changes.

These presumed relations are elaborated in the main hypothesis to be tested, and eight subhypotheses. The main hypothesis is the following: *"The better the strategic alliance, the larger the visibility of changes, which in turn will increase the chances of a successful strategic alliance between the ROC and the business sector with respect to Learning&Working"*. Next to the characteristics mentioned above, also the three terms 'good strategic alliance', 'sustainable strategic alliance', and 'successful strategic alliance' are used in determining the connection between SA and C3C and testing the main hypothesis. A strategic alliance is 'good' if at least four of the five principal characteristics of SA are sufficiently present. A relation is 'sustainable' if, in addition, the combination characteristic Sustainable&Dynamic is also present to a sufficient degree. An alliance can only be considered successful if it is both good and sustainable, and if there are sufficient concrete changes in the competences, the curriculum, and the context.

For the empirical study, a total of 412 persons (193 from the ROC and 219 from the business sector) and 41 organizations were approached, collaborating in 4 different co-operation alliances, which consisted of 40 bilateral relations between the ROC and the companies. In each of the four co-operation alliances, one ROC was responsible for the collaboration relations with all partners, both bilaterally and multilaterally. The partners differed per co-operation alliance. In this dissertation, we mainly investigated the bilateral relations between the ROC and the companies. Within the training sectors Technique, Care & Social Welfare, and Economics, 16 innovation and 13 control trajectories were examined, in which 159 apprentices and 163 employees participated. The response to the questionnaire was 44%. The participants in the co-operation relations and strategic alliances selected for this research formed pioneering parties in the vocational education and business sectors, seeking one another to engage in knowledge innovation. Their relations of the parties involved were uncommon in the sense that they showed an above average preparedness to form strategic knowledge alliances. The scores of the various alli-

ances, applied by both the ROC managers and the companies, do not differ significantly, and have also been considered by independent third parties as examples of good co-operation.

The relatively high values of the principal characteristics of Strategic Alliances and the dimension 'Sustainable' as shown by the empirical research are proof of this. The mean score of the five principal characteristics as well as that of 'Sustainable' were above the scale average. The highest values were found for the two principal characteristics Quality and Duration. The characteristic 'Temporisation' had the lowest score, while also the score of Knowledge transfer was relatively low. Although in the case of both the ROC and the companies the quality of the co-operation was good, the latter felt that the knowledge innovation was insufficiently robust. The relatively low values of the two principal characteristics of strategic alliances (Knowledge transfer and Temporisation) already demonstrated this to a certain extent, but also the lower values of the three characteristics of Change (C3C) and the 'Dynamics' dimension confirmed this picture. The mean value of C3C was under the scale average, while the same applied to 'Dynamics'. Among the three characteristics of 'Change', 'Curriculum' scored the highest and 'Context' the lowest. However, apprentices and employees involved in the innovation trajectories scored considerably higher values on the 'Change' dimension than the control groups which were not involved in this project.

Our test results supported five of the eight subhypotheses. The main hypothesis was only partly confirmed: four of the six characteristics of strategic alliances are positively correlated with the characteristics of 'Change', namely the principal characteristics Quality of the relation, Duration of the co-operation and Knowledge transfer, and the combination characteristic Sustainable and Dynamics. These four characteristics showed the closest correlation with changes in competences; the correlations with changes in the curriculum were the lowest. Among the four characteristics of strategic alliances, the combination characteristic Sustainable and Dynamics corresponded the most with the changes. On the basis of the results, it can be concluded that there is an empirically based connection between the characteristics of the alliances and the results with respect to the apprentices participating in the innovation trajectories. This relation is, however, less strong than expected, while the number of alliances which are really successful is also smaller than initially presumed.

What deserves consideration is that even in a group as motivated as the one in our research, only two relations can be characterised as really successful. In this respect, the focus on a suitable point of departure to achieve concrete results remains relevant and can contribute to achieving higher levels of success. Trusting one another is not enough, not even if considerable experience has already been gained in the field of innovation. To be able to assess the possibilities of knowledge transfer, the parties involved have to be sufficiently informed about each other's social capital. Our sketch of the two successful strategic alliances indicates that a focus on the partner, a sense of schooling, learning as much as possible at the workplace, and ample attention to knowledge transfer are important factors in achieving a successful alliance.

This research has taught us that qualitatively good and sustainable co-operation relationships are not necessarily successful relationships, not even when the parties know one another well and have experience in the field of innovation. This is in contradistinction with what might be expected, since the aim of initiating co-operation relations is to improve the education provided to apprentices and employees. The co-operation relations especially lack sufficient dynamics in the areas of transferring knowledge (transfer) and temporisation (timing) of the inter-organizational (ROC and business sector) knowledge innovation processes, and neither do they offer insight into the causal relationship between changes in the context and in the competences. To increase this understanding both parties should be more focussed on this issue.

In addition, this research study has resulted in a number of remarkable conclusions about the role of the ROC. The ROCs image of its partner is not always correct. Sometimes the ROC starts from the wrong assumptions about the company, such as a supposed emphasis on commercial interests, a focus on reinforcing competitiveness, or the notion that the company does not approve of the double task of the ROC. The research has sketched a situation in which the ROC is less confident than the company, even though it is more focussed on issues of co-operation than on knowledge innovation. The ROC is insufficiently aware of its own qualities and those of its partners in the business sector, and makes insufficient use of these capabilities. Investing in improving the knowledge about its partners and increasing its self-confidence would have a positive effect on the co-operation results. The more the ROCs starting position is made explicit or rooted in its own home base, the more its self-confidence will grow, and the better it will be able to approach the ex-

ternal parties from a strong basis. In actual fact, the ROCs point of departure can only be solid if it knows its partner well enough.

However, successful strategic alliances cannot be realised if their basis is determined by one party only. Here, mutual commitment has to be considered an important factor in achieving successful relations. Both parties' points of departure can be defined by means of the following two key statements and some recommendations:

1. *Know yourself and your partner*

Successful alliances cannot thrive in circles which hardly know one another, and which have been brought together by other parties. Try to resist the enticements of subsidy-driven co-operation alliances with partners whom one does not know, and who are not engaged in apprentice-employee combinations. Avoid co-operation alliances where various intermediaries arrange the relations between the parties. A strategic knowledge alliance is essential for the organization as well as for the people in this organization because the partners need to be directly connected with each other, not only on the strategic level, but on all levels within the organization, where mutual knowledge transfer can fully and fruitfully be developed (also between apprentices and employees).

2. *Knowledge innovation is relational, invest in connections and combinations*

The relations among people and the combination of implicit and explicit knowledge are the main factors in co-operation aimed at knowledge innovation. Engaging in these relations, as well as retaining and strengthening them, is an extremely difficult task. It requires a great deal of preparation, some degree of stability and continuity of the partners, and a long time horizon. It is hindered by socio-economic conditions, where quick, easy, and flexible relations are valued highly, and considered as a sign of innovative capability. This is, however, the opposite of the objective of a successful strategic alliance, which in the first place revolves around the concept of connection. This is why in these volatile times, in which flexibility is considered as a key concept, it is highly important to choose a point of departure based on achieving long-term stability, continuity, and strong connections in terms of people and content, allowing the dynamics of the knowledge alliance to 'run free'. The order is: first sustainable, next dynamic.

Partners with the power to connect and the ability to combine, who co-operate in a sustainable manner, can achieve dynamic knowledge innovations in successful alliances with results which are perceived as concrete improvements by both the apprentices and the employees, now and in the future. At the present time, however, this unfortunately is not yet the case, as this empirical and theoretical research study has indicated.